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## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

- (Currently amended) A method for deuteration of a compound having an aromatic ring 1. and/or a heterocyclic ring, comprising reacting the compound having an aromatic ring and/or a heterocyclic ring with a heavy hydrogen source in the presence of an activated mixed catalyst of not less than two kinds of catalysts selected from among a palladium catalyst, a platinum catalyst, a rhodium catalyst, an iridium catalyst, a ruthenium catalyst, a nickel catalyst and a cobalt catalyst.
- 2. (Original) The method for deuteration according to claim 1, wherein the heavy hydrogen source is a deuterated solvent.
- (Original) The method for deuteration according to claim 2, wherein the deuterated 3. solvent is heavy water (D2O).
- (Original) The method for deuteration according to claim 1, wherein the activated mixed 4. catalyst is a catalyst obtained by activating a mixed catalyst of not less than two kinds of catalysts selected from among a non-activated palladium catalyst, platinum catalyst, rhodium catalyst, iridium catalyst, ruthenium catalyst, nickel catalyst and cobalt catalyst by contact with hydrogen gas or heavy hydrogen gas.
- 5. (Original) The method for deuteration according to claim 4, wherein the contact of the non-activated mixed catalyst with hydrogen gas or heavy hydrogen gas is carried out in a reaction system of the deuteration.
- 6. (Original) The method for deuteration according to claim 1, wherein the activated mixed catalyst is an activated mixed catalyst of a palladium catalyst and a platinum catalyst.
- 7. (Original) The method for deuteration according to claim 6, wherein the palladium catalyst is palladium carbon.

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- 8. (Original) The method for deuteration according to claim 6, wherein the platinum catalyst is platinum carbon.
- 9. (Original) The method for deuteration according to claim 6, wherein the activated mixed catalyst of a palladium catalyst and a platinum catalyst has a weight ratio of each metal in the palladium catalyst and the platinum catalyst of 1:99 to 99: 1.
- 10. (Currently amended) The method for deuteration according to claim 1, wherein the compound having an aromatic ring and/or a heterocyclic ring has an alkylene chain bonded to the aromatic ring and/or a heterocyclic ring.
- 11. (Currently amended) The method for deuteration according to claim 1, wherein the compound having an aromatic ring and/or a heterocyclic ring has an alkylamino group bonded to the aromatic ring and/or a heterocyclic ring.
- 12. (Currently amended) The method for deuteration according to claim 1, wherein the compound having an aromatic ring and/or a heterocyclic ring has a carboxyl group bonded to the aromatic ring and/or a heterocyclic ring.